

# ZAXIS670



ZX670LCR-5



## HYDRAULIC EXCAVATOR

Model Code ZX670LCH-5B / ZX670LCR-5B

Engine Rated Power 345 kW (463 HP)

Operating Weight ZX670LCH-5B: 68 300 - 69 800 kg

ZX670LCR-5B: 69 300 - 69 500 kg

Backhoe Bucket ISO Heaped ZX670LCH-5B: 1.80 - 3.30 m<sup>3</sup>

ZX670LCR-5B: 2.90 - 3.30 m<sup>3</sup>



# WALKAROUND

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Increased speed will maximise production levels on the job site.

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#### Higher productivity

The HIOS III B hydraulic system achieves higher productivity with better fuel consumption than the conventional ZAXIS model, which helps to reduce costs.

#### Larger swing power

The increased swing torque makes it easier to dig next to side walls and operate on slopes.

#### Added durability

With a strengthened boom, arm and H/R cab, the ZAXIS 670 can work for lengthy periods in rugged environments.

#### Faster movement

The new hydraulic system increases the front attachment speed during combined and single operation.



**ZAXIS** Empower your Vision.

A desire to empower your vision is at the heart of the design of Hitachi large excavators. The ZAXIS 670 has been created with careful consideration of five key factors: performance, productivity, comfort, durability and reliability. Our aim is to provide our customers with high-quality and efficient machines that can work effectively in challenging environments. We also want operators to be able to work safely and comfortably, and ultimately to enjoy every aspect of using Hitachi construction machinery. And to help you enjoy the optimum availability of your machine, we have also incorporated a variety of easy maintenance features and developed the comprehensive Hitachi Support Chain after-sales programme.

### **Expanded leg room**

The seat and console can slide further back on the new ZAXIS, providing a more comfortable working environment for the operator. The rightside console has been ergonomically re-designed.

### **Ultimate comfort**

The heated air suspension seat is ideal in cold climates and absorbs vibration during operation minimising operator fatigue.

### **Easily accessible information**

The large multi-function LCD monitor screen is easy to view in bright sunlight or darkness and provides technical data.

### **Quick and easy service access**

The air conditioner condenser can be opened for easy cleaning. Inspection parts are conveniently located.



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# PERFORMANCE

Our customers expect a consistently high level of performance from their large Hitachi excavators, whether they are working on large-scale construction projects or busy quarries. In order to meet those expectations, Hitachi engineers designed the new ZAXIS 670 with a variety of measures intended to increase speed and efficiency, and therefore maximise production levels on any job site.



# Delivering consistently high levels of performance



## Higher level of performance

Operators around the world told us that the ideal large excavator attains more production. So our engineers used the latest innovations to create the new generation of Hitachi large excavators according to these criteria.

The new hydraulic system allows the operator to manoeuvre the machine easily and perform smooth combined operations quickly, whether the machine is digging or loading a dump truck. The front speed is increased by reducing the pressure loss in circuits and the swing torque has increased by 9%.

The speed of light-load operations such as grading has also been improved due to larger volume of hydraulic flow.

## Higher productivity

The success of your business is influenced by the productivity and efficiency of your equipment. Ultimately, your investment in Hitachi construction machinery can help you to meet production targets and compete successfully to win tenders within your market.

The HIOS IIIB hydraulic system allows you to achieve 9% higher productivity in H/P mode than the conventional ZAXIS model in the same mode (HP mode)\*. All modes therefore result in faster operation, with lower fuel consumption.

\* Based upon typical work pattern collected via Global e-Service

## Key features

- 9% higher productivity in H/P mode\*
- HIOS IIIB hydraulic system – higher productivity and lower fuel consumption
- Increased front speed
- Increased engine / hydraulic oil cooling efficiency
- Swing torque enhanced by 9%





# PRODUCTIVITY

We understand our customers' needs for construction machinery that can deliver high productivity, but with lower fuel consumption. We are also aware of the implications of the latest EU regulations on emissions standards: large excavators with a smaller environmental impact are increasingly in demand. With the design of the new ZAXIS 670, our aim was to balance a powerful performance with sustainable efficiency, to produce a machine that would continue to exceed expectations in busy quarries and other job sites.



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# Exceeding previous levels of efficiency



## Sustainable efficiency

The sustainable development of the Hitachi product range to minimise its impact on the environment continues to be one of our main priorities. To comply with EU emission control stage IIIB, we have ensured that our large excavators have been equipped with several environmentally friendly features.

A muffler filter has been installed on the ZAXIS 670 to capture air pollutants, which are automatically burnt thanks to an oxidation catalyst and exhaust temperature control. Nitrous oxide levels are also reduced by the variable geometry turbocharger and high volume-cooled EGR (Exhaust Gas Recirculation).

To reduce emissions, prevent fuel wastage and lower noise levels in the cab, the ZAXIS 670 has an Auto Shut-down feature. This automatically drops the engine revolutions to low idle and then stops the engine after the pilot shut-off lever has been raised.

In addition, the new ZAXIS large excavator has many recyclable parts, which also help to reduce its impact on the environment.

## Powerful efficiency

The new ZAXIS 670 is equipped with a powerful new-generation Stage IIIB-compliant engine, which delivers higher productivity with greater fuel efficiency. Using the EN590 fuel, compliant with the European standard, plus the genuine fuel filter and engine oil, Super Wide DH2 or equivalent, will ensure optimum engine efficiency.

The new engine has a common rail-type fuel injection system, which delivers the precise quantity of pressurised fuel to achieve effective combustion, and reduces fuel consumption and particulate matter. The HIOS IIIB hydraulic system has also been applied to the new ZAXIS 670 to reach higher yields with better fuel consumption than the previous model.

## Key features

- Powerful and sustainable
- Stage IIIB-compliant engine
- Muffler filter that burns particulate matter
- Variable geometry turbocharger
- High volume-cooled EGR system
- HIOS IIIB hydraulic system – fuel efficiency and higher productivity
- Environmentally friendly design
- Auto Shut-down – fuel saving for carbon dioxide reduction





# COMFORT

The comfort and safety of those who operate Hitachi large excavators were among the top design priorities of our engineers. That's why the cab for the new ZAXIS 670 has been carefully created to incorporate a variety of user-friendly features and offers all-round visibility. This has resulted in a pleasant and secure working environment for any job site, and an operator experience that is second to none.





# Comfort and safety come first with Hitachi



## From the comfort of the cab

It's essential for you to feel comfortable while you work, especially if you are operating an excavator for lengthy periods of time in a quarry or large-scale construction site. Hitachi has reviewed the ergonomic design of its ZAXIS excavator cab to ensure that you can complete your shift with ease and enjoy the rest of your day.

The fully adjustable air-suspension seat absorbs vibrations and helps to minimise operator fatigue. Its new sliding mechanism means that it can be moved back further than ever before. More leg room is also available as the space underneath the monitor has been expanded. The pressurized cab keeps dust and particles from entering.

## Enhanced visibility

Healthy and safety are of paramount importance in busy quarries and construction sites. With the latest innovations from Hitachi, the new ZAXIS offers enhanced visibility, particularly on the right-hand side of the machine, to help you avoid any unnecessary damage, and ultimately save you time and money.

The monitor and door have been repositioned, which improves your view and provides easier access to the cab. The excavator is also equipped with the latest rear-view camera, giving you a broader visual range.

## User-friendly functionality

The advanced technology that is incorporated within the new ZAXIS is one of its many advantages. The ergonomic controls and the easy to view colour monitor place the power firmly in your hands.

The new multi-function LCD monitor with a seven-inch screen displays a comprehensive range of useful technical information. It allows you to check the machine's status and settings at a glance and has multi-lingual support in up to 32 languages.

For easy operation, the monitor and ergonomically designed switches have been repositioned and are both conveniently located on the right-hand side of the cab.

## Enjoy your work

By creating a relaxed and pleasant workspace, our aim was to make your day in the cab of the new ZAXIS more enjoyable and therefore more satisfying.

If you enjoy listening to the radio as you work, you will find that the controls for the AM/FM stereo radio are now fully adjustable from the colour monitor. Alternatively, if you wish to plug in an MP3 player, an auxiliary terminal and MP3 player storage has also been added to the sound system, so that you can work smoothly and efficiently to your favourite music.

## Key features

■ Fully adjustable excellent cab

■ Enhanced visibility

■ New colour LCD monitor

■ Auxiliary terminal and MP3 player storage

■ Easily accessible real-time information

■ Expansive leg room

■ Ergonomically designed control panel



# DURABILITY

One of the reasons why customers choose Hitachi is our reputation for producing reliable, durable and high-quality construction equipment. Like all other Hitachi large excavators, the ZAXIS 670 benefits from our advanced technology and manufacturing expertise gained over more than four decades. So it can be relied upon to perform in the toughest quarries and other job sites.



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# Hitachi large excavators are built to last



## Durable parts

Our large excavators have been designed to deliver increased levels of availability and productivity even on the toughest job sites. The aim behind manufacturing such durable machines was to ultimately ensure a lower cost of ownership for our customers.

The strengthened boom and arm on each new ZAXIS 670 are highlights of the machine's enhanced durable characteristics. Both features allow it to cope well with working long hours in rugged environments.

A filter-type high-performance water separator effectively captures moisture in the fuel, reducing impurities and helping to minimise any fuel-related engine problems. Dual fuel main filters and pre-filters are provided as standard on the ZAXIS 670 to reduce fuel system failures.

The fuel injector is protected by diamond-like carbon (DLC) coating, which enhances its reliability and durability, and the engine has a twin-layer fuel main filter that doubles filtration performance.

## H/R cab

A variety of safety measures have been incorporated to minimise risks on the job site. The H/R and OPG\* (Top guard level II) compliant cab is designed to protect the operator from falling objects. The front window, made of straight laminated glass, is fixed to shut out dirt and debris.

\* Operator Protective Guards

## Key features

- Proven Hitachi quality
- OPG (level II) compliant cab
- Reinforced front attachment
- Reinforced undercarriage
- Dual main filters and pre-filters
- More than 40 years of experience



# MAINTENANCE

Time is precious on any large-scale construction site or quarry. So the quicker and easier it is to maintain Hitachi large excavators, the sooner our customers can focus on the task at hand. The new ZAXIS 670 has a range of easily accessible features to allow for quick and easy routine maintenance and cleaning, helping to ensure maximum uptime and providing peace of mind that your machine is performing at optimum capacity.





# Quicker and easier to maintain than ever before



## Easy acces

The design of the new ZAXIS 670 incorporates a range of convenient features for routine maintenance. They have been created by our engineers in order to save you time and make life a little less stressful. The multi-function LCD monitor allows you to manage machine maintenance information quickly and efficiently. And each time you turn on the ignition switch, you can also set the routine service schedule to help prevent breakdowns. All filters are located for easy filter replacement.

## Easy servicing

The new ZAXIS 670 is equipped with a solenoid fuel pump, which means there is no need to pump manually if the engine stops due to lack of fuel or while the main fuel filter is being changed.

The machine's utility space stores an electric grease pump, hose reel and tool box. This means that batteries and an electrical equipment box are conveniently located in one place.

## Easy cleaning

To maximise productivity and ensure optimum levels of availability in the quarry or on any construction site, we have introduced a variety of quick solutions to the new ZAXIS 670 for routine maintenance and cleaning.

One example of these convenient features can be seen on the exterior of the machine, where the air conditioning condenser can be easily opened for cleaning the condenser and radiator located behind. The cleaning process is also easier thanks to the parallel positioning of the cooling package.

## Key features

- Easy daily inspection
- Quick and easy service access
- Relocated filters
- Solenoid fuel pump



# SUPPORT CHAIN

As soon as you become a Hitachi customer, you can rely on first-class after-sales service from your authorised dealer. Hitachi provides extensive support to each of the dealers within the European network, so that they can ensure your ZAXIS 670 continues to meet your requirements and exceed expectations. To further protect your investment in Hitachi construction machinery, we have introduced the Hitachi Support Chain after-sales programme. This gives you the flexibility to create a tailor-made service plan from the the following key-areas, "links" in the chain of service available from Hitachi via your local dealer.





# Flexible after-sales programme to protect your investment

## Global e-Service

The new ZAXIS excavator is equipped with a GPRS communication system\*. This sends a wide range of machine data to the Hitachi main server. Via the Global e-Service database, you will have remote access to all of this data. All you need is an internet connection and your Global e-Service log-in details.

Global e-Service enables you and your dealer to download and share this data, helping you to remotely manage your fleet. The online facility also helps your dealer to proactively advise you on preventive maintenance and related special offers.

The latest information on the ZAXIS excavator is available 24/7 and includes operational data, such as the number of working hours, fuel consumption figures, working modes and location. This helps you to reduce running costs, plan jobs efficiently and keep up to date with machine maintenance – to ensure optimum performance and minimal downtime.

## Technical support

The professional and highly trained Hitachi service team combine the global expertise and knowledge of Hitachi Construction Machinery with your local language and culture. We take a proactive approach towards customer service by continuously training our dealer personnel, so that the available global knowledge is passed on to each individual technician in our dealer network.

## Extended warranty and service contracts

Every new Hitachi model is covered by a full manufacturer's warranty. However, your ZAXIS excavator may require extra protection due to severe working conditions or to minimise equipment repair costs. To meet these demands, our dealers offer the option of a unique extended warranty programme (HELP – Hitachi Extended Life Program) and comprehensive service contracts – the most effective way to optimise the performance of your new ZAXIS excavator.

## Parts and Remanufactured Components

Hitachi offers different lines of parts and components to suit your specific needs. In addition to our range of genuine parts, there are other options available:

- If your machines have been working for several years, Hitachi can offer a second line of genuine parts as an attractively priced solution.
- For that highly demanding application or climate, Hitachi provides a line of parts with extra performance.
- When you are looking for an economical solution for preventive replacements, remanufactured components are the best option.

Whatever choice you make, you can be assured of the renowned Hitachi quality and warranty to give you added peace of mind.

Your Hitachi dealer can supply you with more details on each of the above parts lines.



\* The GPRS communication system is standard equipment for new ZAXIS excavators, however, the availability of the communication system depends on licensing regulations in your country. Please contact your Hitachi dealer for more information or to apply for a Global e-Service account.

## Key features

- Check each of your machines from your office – 24/7
- Have a remote insight into fuel consumption
- Check the current and previous locations and movements of your machine(s)

- See maintenance status and items due for renewal on each of your machines
- Receive e-mail notifications for any machine alerts, unexpected movements and so on

# SPECIFICATIONS

## ENGINE

Model .....	Isuzu AL-6WG1XZSA-02
Type .....	4-cycle water-cooled, common rail direct injection
Aspiration .....	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment .....	Muffler filter
No. of cylinders .....	6
Rated power	
ISO 9249, net .....	H/P mode:
(Without Fan)	345 kW (463 HP) at 1 800 min <sup>-1</sup> (rpm)
EEC 80/1269, net .....	H/P mode:
(Without Fan)	345 kW (463 HP) at 1 800 min <sup>-1</sup> (rpm)
SAE J1349, net .....	H/P mode:
(Without Fan)	345 kW (463 HP) at 1 800 min <sup>-1</sup> (rpm)
Maximum torque .....	1 980 Nm (202 kgf m) at 1 500 min <sup>-1</sup> (rpm)
Piston displacement .....	15.681 L
Bore and stroke .....	147 mm x 154 mm
Batteries .....	2 x 12 V / 170 Ah

## HYDRAULIC SYSTEM

### Hydraulic Pumps

Main pumps .....	2 variable displacement axial piston pumps
Maximum oil flow .....	2 x 489 L/min
Pilot pump .....	1 gear pump
Maximum oil flow .....	50 L/min

### Hydraulic Motors

Travel .....	2 axial piston motors with parking brake
Swing .....	2 axial piston motors

### Relief Valve Settings

Implement circuit .....	31.9 MPa (325 kgf/cm <sup>2</sup> )
Swing circuit .....	29.4 MPa (300 kgf/cm <sup>2</sup> )
Travel circuit .....	34.3 MPa (350 kgf/cm <sup>2</sup> )
Pilot circuit .....	3.9 MPa (40 kgf/cm <sup>2</sup> )
Power boost .....	34.3 MPa (350 kgf/cm <sup>2</sup> )

### Hydraulic Cylinders

	Quantity	Bore	Rod diameter
Boom	2	190 mm	130 mm
Arm	1	200 mm	140 mm
Bucket	1	180 mm	130 mm
Bucket (BE)	1	190 mm	130 mm

## UPPERSTRUCTURE

### Revolving Frame

D-section frame for resistance to deformation.

### Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed ..... 9.0 min<sup>-1</sup> (rpm)

### Operator's Cab

Independent spacious (H/R cab), 1 025 mm wide by 1 817 mm high, conforming to ISO\* Standards.

\* International Organization for Standardization

## UNDERCARRIAGE

### Tracks

Track shoes with double grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

### Numbers of Rollers and Shoes on Each Side

Upper rollers .....	3
Lower rollers .....	8
Track shoes .....	47
Full track guard .....	1

### Travel Device

Each track driven by axial piston motor through reduction gear for counterrotation of the tracks. Parking brake is spring-set/hydraulic-released disc type.

Automatic transmission system: High-Low.

Travel speeds .....	High : 0 to 5.2 km/h
	Low : 0 to 3.6 km/h

Maximum traction force .. 460 kN (46 900 kgf)

Gradeability ..... 70% (35 degree) continuous

## SOUND LEVEL

Sound level in cab according to ISO 6396 .....	LpA 74 dB(A)
External sound level according to ISO 6395 and	
EU Directive 2000/14/EC .....	LwA 108 dB(A)

## SERVICE REFILL CAPACITIES

Fuel tank .....	900.0 L
Engine coolant .....	70.0 L
Engine oil .....	57.0 L
Swing device (each side) .....	10.5 L
Travel device (each side) .....	16.0 L
Hydraulic system .....	750.0 L
Hydraulic oil tank .....	380.0 L



## WEIGHTS AND GROUND PRESSURE

### Operating Weight and Ground Pressure ZX670LCH-5

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
7.8 m H	3.6 m H	Double	650 mm	68 400 kg	102 kPa (1.04 kgf/cm <sup>2</sup> )
		Double	750 mm	68 700 kg	89 kPa (0.91 kgf/cm <sup>2</sup> )
		Double	900 mm	69 800 kg	76 kPa (0.77 kgf/cm <sup>2</sup> )

Including 2.9 m<sup>3</sup> rock bucket (ISO heaped)

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
6.8 m H	2.9 m BE	Double	650 mm	68 300 kg	102 kPa (1.04 kgf/cm <sup>2</sup> )
		Double	750 mm	68 600 kg	89 kPa (0.91 kgf/cm <sup>2</sup> )
		Double	900 mm	69 700 kg	76 kPa (0.77 kgf/cm <sup>2</sup> )

Including 3.3 m<sup>3</sup> rock bucket (ISO heaped)

### ZX670LCR-5

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
7.8 m R	3.6 m R	Double	650 mm	69 300 kg	104 kPa (1.06 kgf/cm <sup>2</sup> )

Including 2.9 m<sup>3</sup> R-bucket (ISO heaped)

Boom type	Arm type	Shoe grouser type	Shoe width	Operating weight	Ground pressure
6.8 m BER	2.9 m BER	Double	650 mm	69 500 kg	104 kPa (1.06 kgf/cm <sup>2</sup> )

Including 3.3 m<sup>3</sup> R-bucket (ISO heaped)

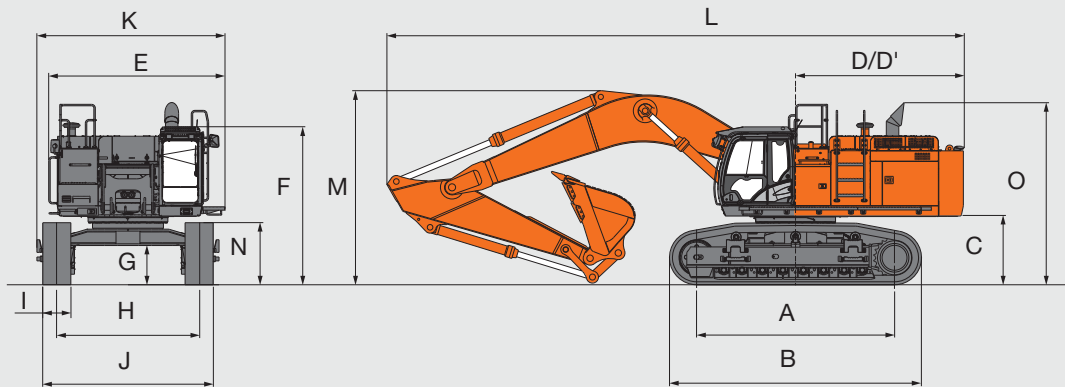
## BUCKET AND ARM DIGGING FORCE

	ZAXIS 670LCH / ZAXIS 670LCR	
	6.8 m BE-boom / 6.8 m BER-boom	7.8 m H-boom / 7.8 m R-boom
Boom length		
Arm length	2.9 m BE-arm / 2.9 m BER-arm	3.6 m H-arm / 3.6 m R-arm
Bucket digging force* ISO	369 kN (37 700 kgf)	324 kN (33 100 kgf)
Bucket digging force* SAE : PCSA	332 kN (33 900 kgf)	286 kN (29 200 kgf)
Arm crowd force* ISO	306 kN (31 200 kgf)	255 kN (26 000 kgf)
Arm crowd force* SAE : PCSA	297 kN (30 300 kgf)	246 kN (25 100 kgf)

\* At power boost

# SPECIFICATIONS

## DIMENSIONS



Unit: mm

	ZAXIS 670LCH <sup>12</sup>			ZAXIS 670LCR <sup>13</sup>
A Distance between tumbler	4 590			4 590
B Undercarriage length	5 840			5 840
<sup>11</sup> C Counterweight clearance	1 530			1 530
D Rear-end swing radius	4 020			4 020
D' Rear-end length	3 910			3 910
E Overall width of upperstructure	4 090			4 090
F Overall height of cab	3 660			3 660
<sup>11</sup> G Min. ground clearance	860			860
H Track gauge : Extended / Retracted	3 300 / 2 830			3 300 / 2 830
I Track shoe width				
J Undercarriage width : Extended / Retracted	G 650	G 750	G 900	G 650
	3 950 / 3 480	4 050 / 3 580	4 200 / 3 730	3 950 / 3 480
K Overall width	4 360			4 360
L Overall length	13 400			13 400
M Overall height of boom	4 460			4 460
N Track height	1 440			1 440
O Overall height of base machine	4 230			4 230

<sup>11</sup> Excluding track shoe lug G: Double grouser shoe

<sup>12</sup> Equipped with 7.8 m H-boom and 3.6 m H-arm

<sup>13</sup> Equipped with 7.8 m R-boom and 3.6 m R-arm

## Backhoe Buckets

Capacity		Width		No. of teeth	Weight	Recommendation			
ISO heaped	CECE heaped	Without side cutters	With side cutters			ZAXIS 670LCH		ZAXIS 670LCR	
						6.8 m BE-boom	7.8 m H-boom	6.8 m BER-boom	7.8 m R-boom
<sup>11</sup> 2.9 m <sup>3</sup>	2.5 m <sup>3</sup>	1 680 mm	1 680 mm	5	2 850 kg	x	●	-	-
<sup>11</sup> 3.3 m <sup>3</sup>	2.9 m <sup>3</sup>	1 790 mm	1 790 mm	5	3 120 kg	●	x	-	-
<sup>12</sup> 1.5 m <sup>3</sup>	1.3 m <sup>3</sup>	-	1 310 mm	3	3 150 kg	x	●	-	-
<sup>12</sup> 1.8 m <sup>3</sup>	1.6 m <sup>3</sup>	-	1 570 mm	3	3 750 kg	●	x	-	-
<sup>13</sup> 2.9 m <sup>3</sup>	2.5 m <sup>3</sup>	1 680 mm	1 680 mm	5	3 300 kg	-	-	x	●
<sup>13</sup> 3.3 m <sup>3</sup>	2.9 m <sup>3</sup>	1 790 mm	1 790 mm	5	3 610 kg	-	-	●	x
One-point ripper				1	1 800 kg	●	●	●	●

<sup>11</sup> Rock bucket

<sup>12</sup> Ripper bucket

<sup>13</sup> R-bucket

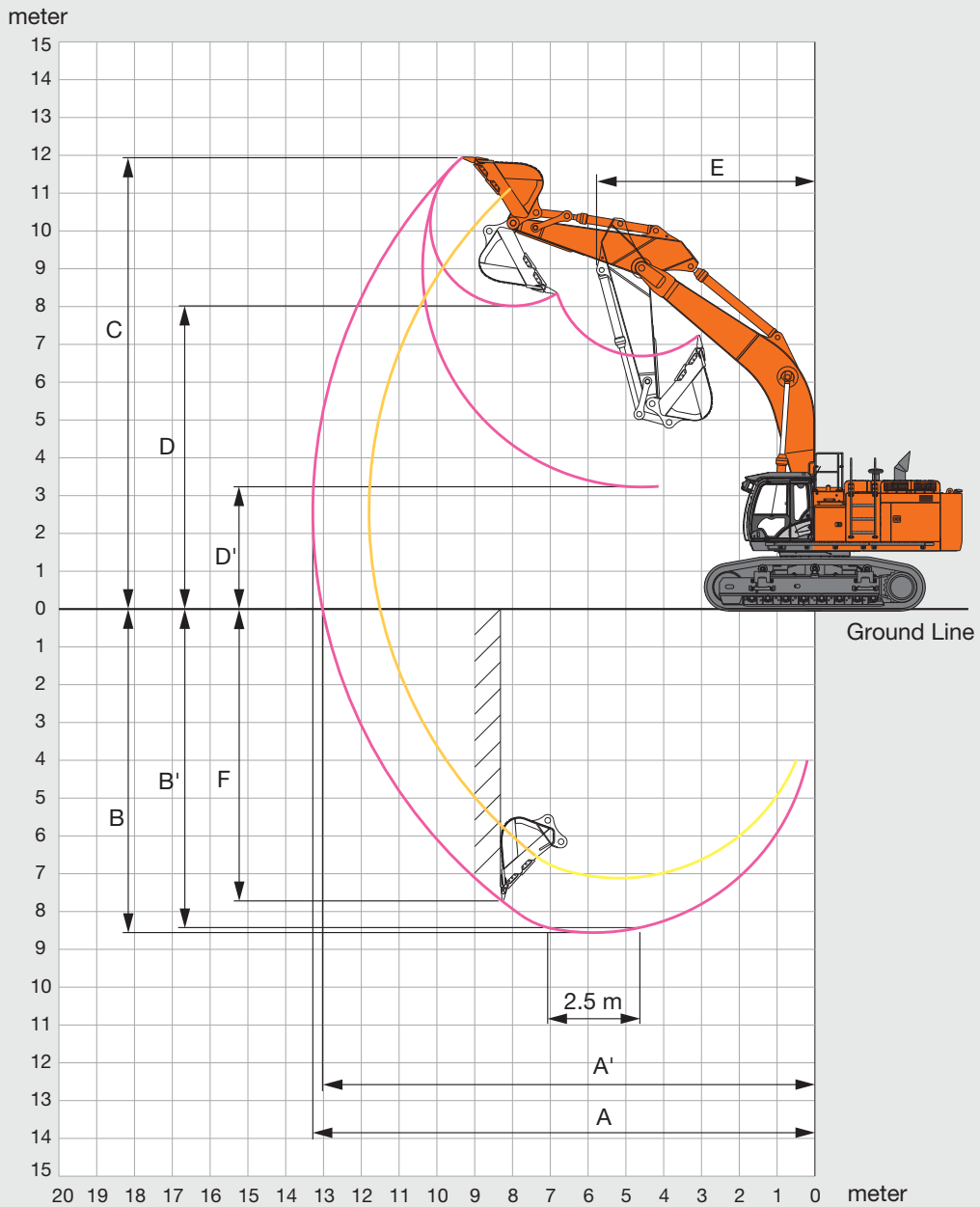
● Heavy-duty service

x Cannot be installed

- Not applicable



## WORKING RANGES



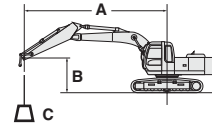
Unit: mm

	ZAXIS 670LCH / ZAXIS670LCR	
	6.8 m BE-boom / 6.8 m BER-boom	7.8 m H-boom / 7.8 m R-boom
Arm length	2.9 m BE-arm / 2.9 m BER-arm	3.6 m H-arm / 3.6 m R-arm
A Max. digging reach	11 800	13 280
A' Max. digging reach (on ground)	11 500	13 030
B Max. digging depth	7 120	8 560
B' Max. digging depth for 2.5 m level	6 970	8 420
C Max. cutting height	11 190	11 940
D Max. dumping height	7 330	8 020
D' Min. dumping height	3 200	3 230
E Min. swing radius	5 240	5 780
F Max. vertical wall	5 280	7 720

Excluding track shoe lug

# LIFTING CAPACITIES

- Notes: 1. Ratings are based on ISO 10567.  
 2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.  
 3. The load point is the center-line of the bucket pivot mounting pin on the arm.  
 4. \*Indicates load limited by hydraulic capacity.  
 5. 0 m = Ground.



A: Load radius  
 B: Load point height  
 C: Lifting capacity

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities.

## ZAXIS 670LCH

Rating over-front Rating over-side or 360 degrees Unit : kg

Conditions	Load point height	Load radius												At max. reach		
		3.0		4.5		6.0		7.5		9.0		10.5		meter		
BE-Boom 6.8 m BE-Arm 2.9 m Counterweight 10 400 kg Shoe 650 mm	7.5							*16 810	*16 810					*12 500	*12 500	8.2
	6.0					*19 710	*19 710	*17 550	*17 550					*12 210	*12 210	8.9
	4.5					*22 640	*22 640	*18 960	17 050	*17 010	12 850			*12 320	11 950	9.4
	3.0					*25 600	22 670	*20 520	16 370	17 100	12 520			*12 810	11 350	9.5
	1.5					*27 590	21 730	*21 730	15 810	16 770	12 220			*13 740	11 240	9.5
	0 (Ground)					*28 180	21 240	21 650	15 460	16 590	12 040			*15 290	11 620	9.2
	-1.5			*35 530	33 490	*27 310	21 130	21 540	15 360					*17 490	12 670	8.6
-3.0	*37 800	*37 800	*31 570	*31 570	*24 670	21 340	*18 920	15 590					*17 710	14 890	7.7	
-4.5			*24 650	*24 650	*18 660	*18 660							*16 670	*16 670	6.4	
H-Boom 7.8 m H-Arm 3.6 m Counterweight 10 400 kg Shoe 650 mm	7.5									*13 510	*13 510			*9 300	*9 300	9.9
	6.0							*15 670	*15 670	*14 180	13 230	*9 770	*9 770	*9 330	*9 330	10.5
	4.5					*21 570	*21 570	*17 470	16 870	*15 160	12 780	*13 600	10 000	*9 590	9 360	10.9
	3.0					*24 710	22 140	*19 270	16 070	*16 220	12 310	13 330	9 750	*10 090	8 940	11.0
	1.5					*26 760	21 130	*20 690	15 410	16 450	11 900	13 080	9 510	*10 890	8 820	11.0
	0 (Ground)			*15 130	*15 130	*27 490	20 600	21 150	14 970	16 130	11 600	12 900	9 340	*12 110	9 000	10.7
	-1.5			*23 220	*23 220	*27 090	20 430	20 920	14 770	15 970	11 450			*13 210	9 540	10.2
-3.0	*22 490	*22 490	*32 660	*32 660	*25 640	20 510	*20 510	14 770	16 010	11 490			14 740	10 630	9.5	
-4.5	*32 920	*32 920	*28 660	*28 660	*22 850	20 830	*18 200	15 020					*15 290	12 730	8.4	
-6.0			*22 270	*22 270	*17 700	*17 700							*14 720	*14 720	6.9	
H-Boom 7.8 m H-Arm 3.6 m Counterweight 10 400 kg Shoe 900 mm	7.5									*13 510	*13 510			*9 300	*9 300	9.9
	6.0							*15 670	*15 670	*14 180	13 490	*9 770	*9 770	*9 330	*9 330	10.5
	4.5					*21 570	*21 570	*17 470	17 200	*15 160	13 040	*13 600	10 220	*9 590	9 560	10.9
	3.0					*24 710	22 590	*19 270	16 390	*16 220	12 570	13 620	9 960	*10 090	9 140	11.0
	1.5					*26 760	21 570	*20 690	15 740	16 810	12 160	13 370	9 720	*10 890	9 020	11.0
	0 (Ground)			*15 130	*15 130	*27 490	21 050	*21 460	15 300	16 490	11 860	13 200	9 560	*12 110	9 210	10.7
	-1.5			*23 220	*23 220	*27 090	20 870	21 390	15 090	16 330	11 710			13 510	9 760	10.2
-3.0	*22 490	*22 490	*32 660	*32 660	*25 640	20 950	*20 510	15 100	16 370	11 740			15 070	10 870	9.5	
-4.5	*32 920	*32 920	*28 660	*28 660	*22 850	21 270	*18 200	15 340					*15 290	13 010	8.4	
-6.0			*22 270	*22 270	*17 700	*17 700							*14 720	*14 720	6.9	

## ZAXIS 670LCR

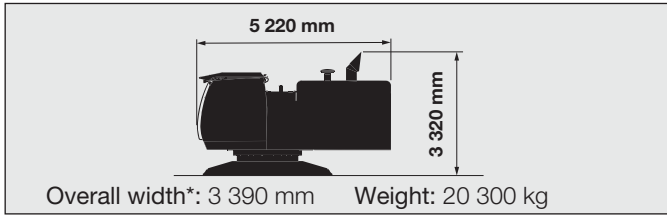
Rating over-front Rating over-side or 360 degrees Unit : kg

Conditions	Load point height m	Load radius m												At max. reach		
		3.0		4.5		6.0		7.5		9.0		10.5		meter		
BER-Boom 6.8 m BER-Arm 2.9 m Counterweight 10 400 kg Shoe 650 mm	7.5							*16 640	*16 640					*12 450	*12 450	8.2
	6.0					*19 520	*19 520	*17 360	*17 360					*12 160	*12 160	9.0
	4.5					*22 420	*22 420	*18 750	17 220	*16 810	12 960			*12 270	12 040	9.4
	3.0					*25 330	22 890	*20 290	16 520	*17 480	12 610			*12 750	11 430	9.6
	1.5					*27 290	21 920	*21 480	15 930	17 300	12 300			*13 680	11 310	9.5
	0 (Ground)					*27 870	21 410	*21 940	15 570	17 110	12 120			*15 230	11 700	9.2
	-1.5			*35 140	*33 790	*27 000	21 290	*21 300	15 470					*17 530	12 760	8.7
-3.0	*37 760	*37 760	*31 200	*31 200	*24 370	21 520	*18 680	15 710					*17 480	15 010	7.8	
-4.5			*24 310	*24 310	*18 390	*18 390							*16 410	*16 410	6.4	
R-Boom 7.8 m R-Arm 3.6 m Counterweight 10 400 kg Shoe 650 mm	7.5									*13 310	*13 310			*9 230	*9 230	9.9
	6.0							*15 450	*15 450	*13 960	13 330	*9 700	*9 700	*9 230	*9 230	10.5
	4.5					*21 280	*21 280	*17 210	17 010	*14 920	12 860	*13 520	10 040	*9 230	9 380	10.9
	3.0					*24 370	22 290	*18 980	16 160	*15 960	12 370	13 720	9 770	*9 230	8 960	11.1
	1.5					*26 380	21 230	*20 380	15 480	*16 830	11 940	13 460	9 520	*9 230	8 830	11.0
	0 (Ground)			*15 060	*15 060	*27 090	20 690	*21 130	15 020	16 600	11 630	13 270	9 350	*12 030	9 010	10.8
	-1.5			*23 160	*23 160	*26 690	20 510	*21 120	14 810	16 440	11 480			13 590	9 560	10.3
-3.0	*22 430	*22 430	*32 180	*32 180	*25 240	20 600	*20 180	14 820	*16 280	11 510			*14 890	10 650	9.6	
-4.5	*32 860	*32 860	*28 190	*28 190	*22 470	20 940	*17 890	15 080					*15 000	12 780	8.5	
-6.0			*21 840	*21 840	*17 360	*17 360							*14 410	*14 410	6.9	

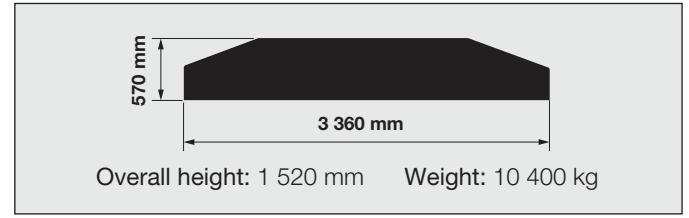


# TRANSPORTATION

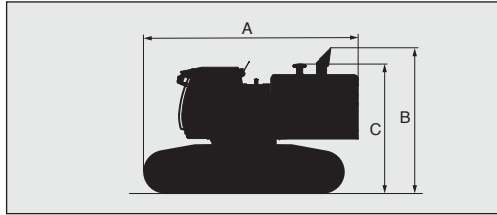
## UPPERSTRUCTURE



## COUNTERWEIGHT



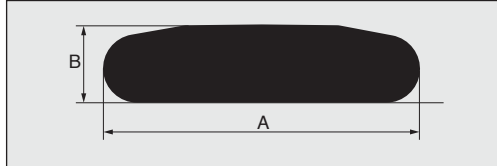
## BASIC MACHINE (WITHOUT COUNTERWEIGHT)



	Shoe width	A	B	C <sup>1</sup>	Overall width <sup>2</sup>	Weight
ZX670LCH	650 mm	6 240 mm	4 230 mm	3 760 mm	3 480 mm	43 600 kg
	750 mm				3 580 mm	44 000 kg
	900 mm				3 730 mm	45 000 kg
ZX670LCR	650 mm	6 240 mm	4 230 mm	3 760 mm	3 480 mm	43 900 kg

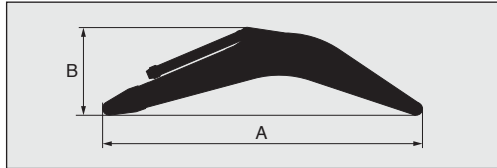
<sup>1</sup> Without exhaust funnel  
<sup>2</sup> Undercarriage retracted

## SIDE FRAME



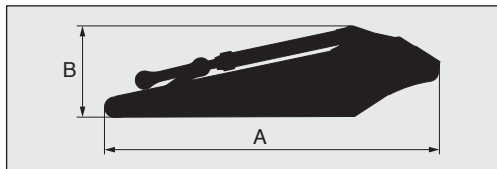
	Shoe width	A	B	Overall width	Weight
ZX670LCH	650 mm	5 840 mm	1 450 mm	1 250 mm	10 600 kg
	750 mm			1 250 mm	10 900 kg
	900 mm			1 320 mm	11 400 kg
ZX670LCR	650 mm	5 840 mm	1 450 mm	1 250 mm	10 800 kg

## BOOM



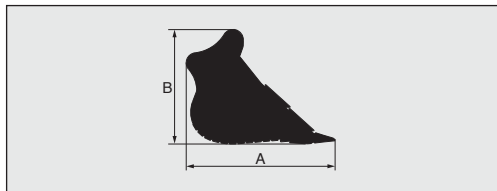
Boom	A	B	Overall width	Weight
6.8 m BE	7 140 mm	2 510 mm	1 390 mm	6 110 kg
7.8 m H	8 130 mm	2 330 mm	1 390 mm	6 560 kg
6.8 m BER	7 140 mm	2 510 mm	1 390 mm	6 260 kg
7.8 m R	8 130 mm	2 330 mm	1 390 mm	6 760 kg

## ARM



Arm	A	B	Overall width	Weight
2.9 m BE	4 370 mm	1 690 mm	800 mm	3 820 kg
3.6 m H	5 110 mm	1 440 mm	800 mm	3 750 kg
2.9 m BER	4 370 mm	1 690 mm	800 mm	3 950 kg
3.6 m R	5 110 mm	1 440 mm	800 mm	3 900 kg

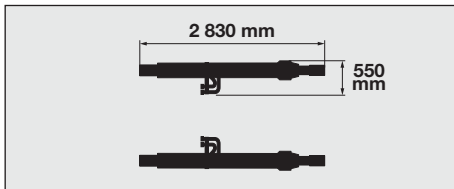
## BUCKET



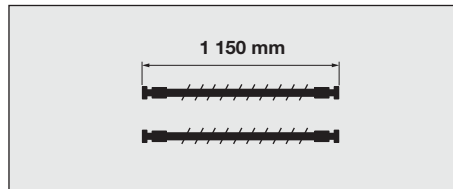
Bucket		A	B	Overall width	Weight
ISO heaped	CECE heaped				
<sup>1</sup> 2.9 m <sup>3</sup>	2.5 m <sup>3</sup>	2 290 mm	1 770 mm	1 680 mm	2 850 kg
<sup>1</sup> 3.3 m <sup>3</sup>	2.9 m <sup>3</sup>	2 250 mm	1 890 mm	1 790 mm	3 120 kg
<sup>2</sup> 2.9 m <sup>3</sup>	2.5 m <sup>3</sup>	2 290 mm	1 770 mm	1 680 mm	3 300 kg
<sup>2</sup> 3.3 m <sup>3</sup>	2.9 m <sup>3</sup>	2 250 mm	1 890 mm	1 790 mm	3 610 kg

<sup>1</sup> ZX670LCH-5  
<sup>2</sup> ZX670LCR-5

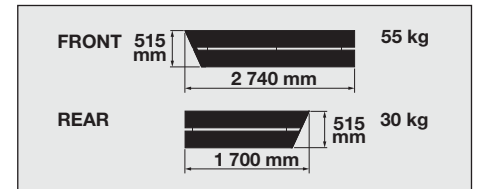
## BOOM CYLINDERS 550 kg X 2 Overall height: 410 mm



## HOSE OF BOOM CYLINDERS 7 kg X 2 / 10 kg X 2



## LEFT SIDEWALK Overall height: 150 mm



# EQUIPMENT

ENGINE	ZAXIS 670LCH	ZAXIS 670LCR
Air cleaner double filters	●	●
Auto idle system	●	●
Auto shut-down control	●	●
Cartridge-type engine oil filter	●	●
Dry-type air double filter with evacuator valve(with air filter restriction switch for monitor)	●	●
Fan guard	●	●
Fuel main filter	●	●
Fuel pre-filter	●	●
Isolation-mounted engine	●	●
Muffler filter	●	●
Power mode control [H/P (High Power) PWR(Power) ECO(Economy) ]	●	●
Pre-cleaner	○	○
Radiator, oil cooler and intercooler with dust protective net	●	●
Radiator reserve tank	●	●
50 A alternator	●	●

HYDRAULIC SYSTEM	ZAXIS 670LCH	ZAXIS 670LCR
Accessories for breaker	○	○
Accessories for breaker & crusher	○	○
Accessories for 2 speed selector	○	○
Auto power lift	●	●
Boom mode selector system	●	●
Control valve with main relief valve	●	●
Drain filter	●	●
Engine speed sensing system	●	●
E-P control system	●	●
Extra port for control valve	●	●
Full-flow filter	●	●
Hose rupture valve	○	○
Pilot filter	●	●
Power boost	●	●
Quick warm-up system for pilot circuit	●	●
Shockless valve in pilot circuit	●	●
Suction filter	●	●
Work mode selector	●	●

CAB	ZAXIS 670LCH	ZAXIS 670LCR
Additional fuse box	●	●
Adjustable armrests	●	●
All-weather sound suppressed steel cab	●	●
AM-FM radio	●	●
Ashtray	●	●
Auto control air conditioner	●	●
Auto-idle selector	●	●
AUX. terminal and storage	●	●

● : Standard equipment    ○ : Optional equipment    — : Not applicable

	ZAXIS 670LCH	ZAXIS 670LCR
Cab: H/R cab	●	●
OPG top guard fitted Level II (ISO10262)	●	●
OPG front guard fitted Level II (ISO10262)	○	○
Laminated straight glass front window	●	●
Left side window can be opened	●	●
Drink holder	●	●
Engine shut-off switch	●	●
Electric double horn	●	●
Evacuation hammer	●	●
Fire extinguisher bracket	○	○
Floor mat	●	●
Footrest	●	●
Front window washer	●	●
Front glass lower guard	○	○
Front glass upper guard	○	○
Glove compartment	●	●
Hot & cool box	●	●
Intermittent windshield wiper	●	●
Key cylinder light	●	●
LED room light with door courtesy	●	●
Pilot control shut-off lever	●	●
Rear tray	●	●
Retractable seat belt	●	●
Rubber radio antenna	●	●
Seat : Adjustable reclining air suspension with heater	●	●
Short wrist control levers	●	●
Storage box	●	●
Sun visor (front)	○	○
Sun visor (side)	○	○
Transparent roof with slide curtain	●	●
2 speakers	●	●
6 fluid-filled elastic mounts	●	●
12 V power outlet	○	○
24 V cigarette lighter	●	●

MONITOR SYSTEM	ZAXIS 670LCH	ZAXIS 670LCR
Alarm buzzers: overheat, engine oil pressure, overload	●	●
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, air filter restriction, work mode, overload, etc	●	●
Display of meters: water temperature, hour, fuel rate, clock	●	●
Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions etc	●	●
32 language selection	●	●



LIGHTS	ZAXIS 670LCH	ZAXIS 670LCR
2 cab lights	●	●
4 cab lights	○	○
3 working lights	●	●

UPPER STRUCTURE		
Auto-grease lubricator (without bucket and link pins)	●	●
Electric fuel refilling pump with auto stop	●	●
Electrical grease pump with hose-reel	●	●
Fuel level float	●	●
Hydraulic oil level gauge	●	●
Ladder	●	●
Rear view camera	○	○
Rear view mirror (right & left side)	●	●
Side walk (cab side)	●	●
Swing parking brake	●	●
Tool box	●	●
Utility space	●	●
170 Ah batteries	●	●
4.5 mm thickness undercover	●	●
10 400 kg counterweight	●	●

UNDERCARRIAGE		
Bolt-on sprocket	●	●
Full track guard	●	●
Hydraulic track adjuster	●	●
Idler track guard	●	●
Reinforced track links with pin seals	●	●
Reinforced idler part	●	●
Reinforced travel motor covers	●	●
Travel parking brake	●	●
Track undercover	●	●
Upper and lower rollers	●	●
650 mm double grouser shoes	●	●
750 mm double grouser shoes	●	—
900 mm double grouser shoes	●	—

FRONT ATTACHMENTS	ZAXIS 670LCH	ZAXIS 670LCR
Arm cylinder hose protectors	●	●
Boom cylinder hose protectors	●	●
Bucket cylinder hose protectors	●	●
Centralized lubrication system	●	●
Damage prevention plate and square bars	●	●
Dirt seal on all bucket pins	●	●
Flanged pin	●	●
Reinforced link A	●	●
Reinforced link B	●	●
2.9 m <sup>3</sup> (ISO heaped) Rock-bucket (with dual type side shrouds)	●	—
7.8 m H-boom and 3.6 m H-arm	●	—
6.8 m BE-boom	○	—
2.9 m BE-arm	○	—
2.9 m <sup>3</sup> (ISO heaped) R-bucket (with dual type side shrouds)	—	●
7.8 m R-boom and 3.6 m R-arm	—	●
6.8 m BER-boom	—	○
2.9 m BER-arm	—	○

MISCELLANEOUS		
Anti-slip steps and handrails	●	●
Lockable fuel refilling cap	●	●
Lockable machine covers	●	●
Onboard information controller	●	●
Standard tool kit	●	●
Theft prevention system*	○	○
Travel direction mark on track frame	●	●
Global e-service	●	●

Standard and optional equipment may vary by country, so please consult your Hitachi dealer for details.

\* Hitachi Construction Machinery cannot be held liable for theft, any system will just minimize the risk of theft.



**Built on the foundation of superb technological capabilities, Hitachi Construction Machinery is committed to providing leading-edge solutions and services to contribute as a reliable partner to the business of customers worldwide.**

## Hitachi Environmental Vision 2025

The Hitachi Group released the Environmental Vision 2025 to curb annual carbon dioxide emissions. The Group is committed to global production while reducing environmental impact in life cycles of all products, and realizing a sustainable society by tackling three goals — prevention of global warming, recycling of resources, and enhancement of ecosystem.

### Reducing Environmental Impact by New ZAXIS

Hitachi makes a green way to cut carbon emissions for global warming prevention according to LCA\*. New ZAXIS utilizes lots of technological advances, including the new ECO mode, and Isochronous Control. Hitachi has long been committed to recycling of components, such as aluminum parts in radiators and oil cooler. Resin parts are marked for recycling.

\*Life Cycle Assessment – ISO 14040

Prior to operating this machine, including satellite communication system, in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory standards (including safety standards) and legal requirements of that particular country. Please do not export or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your Hitachi dealer in case of questions about compliance.

These specifications are subject to change without notice.

Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in color and features. Before use, read and understand the Operator's Manual for proper operation.



KS-EN181EU